

REMARKS

The Examiner is thanked for the careful review of the application as set forth in the outstanding office action. Reconsideration of the application in view of the foregoing amendments and the following discussion is respectfully requested.

Claim Objections

The informalities noted by the Examiner have been addressed by the foregoing amendment.

The claims have been amended to replace "internet" with "Internet" as requested by the Examiner.

In Claim 52, "GFCI" has been specified.

Claim 30 has been amended to include the missing phrase.

Allowable Subject Matter

Claims 50-52 have been objected as depending from a rejected base claim, but are indicated as allowable if rewritten in independent form, and in the case of Claim 52, overcoming the Section 112 rejection.

Claims 50-52 have been rewritten in independent form, and are believed in condition for allowance. The Section 112 rejection of Claim 52 is addressed below.

Claim Rejections - 35 USC 112, First Paragraph

Claim 52 has been rejected as failing to comply with the written description requirement. Particularly, the Examiner asserts that the specification, as originally filed, does not adequately describe a GFCI trip or power down notification. This rejection is respectfully traversed.

The specification does describe the subject matter of Claim 52. For example, FIG. 7C sets out “GFCI TRIP OR POWER DOWN NOTIFICATION” as exemplary owner fee based, dealer/server and beta testing options for the system of FIGS. 7A-7C. Paragraph [0056] further describes FIG. 7C, noting that “other features, typically fee-based services, preferably can provide various notices to the user, and can also provide dealer/service options as shown in FIG. 7C.” Original application Claim 14, for example, recites “means for automatically forwarding an electronic notice or error message to a specified recipient under predetermined circumstances, including response to occurrence of a specified stimulus or event.”

The specification adequately described the feature of Claim 52, and the rejection under Section 112, first paragraph, should be withdrawn.

Claims Rejections - 35 USC 103

In the office action mailed March 6, 2007, Claims 19-20, 30 and 32 were rejected as being unpatentable over Joao (6549130) in view of Smith et al. (“Smith”; 6,192,282).

Claims 21 and 33 stand rejected as being unpatentable over Joao in view of Smith and further in view of alleged “Official Notice.”

Claim 53 stands rejected as being unpatentable over Joao in view of Smith and further in view of alleged “Official Notice.”

Claim 31 stands rejected as being unpatentable over Joao in view of Smith and further in view of alleged “Official Notice.”

Claims 39-44 and 48-49 stand rejected as being unpatentable over Joao in view of Smith and further in view of alleged “Official Notice.”

Each of these rejections is respectfully traversed on the grounds that the applied references do not establish prima facie that the subject matter of these

rejected claims is unpatentable, and further because the applied references do not teach or suggest the subject matter of these claims.

Joao describes a control system and methods for vehicles. "In still another embodiment, the present invention may be utilized in conjunction with a residential premises, residential building and/or a home and/or a household control, monitoring and/or security system... In the case where the present invention is utilized in conjunction with a residential premises, residential building and/or a home and/or a household control, monitoring and security system, the CPU may be electrically connected and/or linked to the home and/or household electrical system, which is located externally from the apparatus. The CPU may or may not be connected with and/or linked to the home electrical system through an electrical system interface. The CPU may transmit signals to, as well as receive signals from, the home electrical system. In this manner, the CPU and the home electrical system, may exchange information between each other... The CPU, upon receiving an appropriate signal from the receiver, and upon the completion of the requisite data processing routine may issue an electrical, an electronic, and/or any other suitable signal, including a digital command signal, to the home electrical system. This electrical, electronic and/or other suitable signal or digital command signal may be one which will disable, re-enable or reset the home electrical system. The CPU may also interrogate the electrical system and/or receive data from the electrical system which is indicative of electrical system status (i.e., whether the electrical system is on or off and/or to what extent certain portions thereof may be on or off)." (Joao at 10:40-67)

Smith describes a method and apparatus for improving building automation. "The present invention relates in general to building automation systems, and in particular to a software system that allows for control of, and/or communication with, end devices and communication systems that utilize different command and communications protocols and languages." (Smith at 1:15-19) This is further explained at 3:9-41:

“When characterized as an apparatus, the present invention is directed to an improved building automation system. It includes a number of components which cooperate to allow optimum building automation and control. A plurality of building automation subsystems are provided. Each of the building automation subsystems includes at least one end device which is subject to control in accordance with a particular control protocol. The plurality of building automation subsystems may individually respond to a relatively large number of different control protocols which are generally incompatible. The present invention further includes a set of interprocess control command which together constitute an interprocess control protocol. In accordance with the present invention, at least one programmable controller is provided with associated memory, which operates to store and selectively execute program instructions, including the set of interprocess control commands. A plurality of modular subsystem programs are provided. Each of these subsystem programs is responsive to interprocess control commands from the interprocess control protocol. Each of the plurality of modular subsystem programs is utilized for generating command signals in accordance with a particular control protocol which may be device specific, from a plurality of available and different control protocols in the building automation subsystems. The present invention also requires the use of a plurality of modular control applications. Each control application is for specific control of at least one of the plurality of building automation subsystems. The plurality of modular control applications utilize particular ones of the set of interprocess control commands to control execution of particular ones of the plurality of modular subsystem programs.”

Claims 19, 20, 30, 32:

Claim 19 is drawn to an apparatus for remotely monitoring and controlling water parameters in a pool or spa bathing installation including a recirculating water flow path, comprising:

- a plurality of sensors for monitoring of a plurality of bathing installation parameters;

- an on board electronic pool/spa control system operatively connected to a bathing installation water pump for circulating water through the recirculating water flow path and a water heater, said control system in electrical communication with said sensors for receiving data signals indicative of the monitored water installation parameters, said control system configured to selectively generate control signals to one or more bathing installation control devices including said pump and said heater to affect a change in said bathing installation parameters;

- a remote web server;

- a dedicated network interface circuit;

- a data communication link between said on board electronic pool/spa control system and said dedicated network interface circuit for carrying data signals and command signals; and

- wherein said dedicated network interface circuit is adapted to provide a web-based Internet connection to said remote web server for transmitting said data signals to said remote web server for collection, storage and processing on said remote web server, and for transmitting commands received from said remote web server to said on board electronic pool/spa control system for controlling said bathing installation control devices.

Applicants respectfully submit that the subject matter of Claim 19 is not taught or suggested by any proper combination of Joao and Smith.

Joao does not describe at least the plurality of sensors, the on board electronic pool/spa control system, the dedicated network interface circuit or the data communication link as recited in Claim 19, nor has the Examiner asserted that Joao describes these features. The Examiner alleges that Joao teaches a system for remotely monitoring and controlling pool equipment through the Internet by utilizing a server. Applicants respectfully disagree with this broad allegation, but do agree that Joao does not teach the pool equipment specifically being utilized for controlling water parameters of the pool itself.

The Examiner asserts that Smith “teaches a building automation system, which may be accessed remotely, such as through the World Wide Web (e.g. C9 L55-59), wherein parameters and/or devices associated with a pool, spa or steam room may be controlled. These parameters and/or devices include temperature controls, heaters, pumps and chemicals (e.g. Figure 1 element 23).” Here again, Smith does not describe at least the plurality of sensors, the on board electronic pool/spa control system, the dedicated network interface circuit or the data communication link as recited in Claim 19.

Neither reference describes an on board electronic pool/spa control system. The Joao system includes a CPU which is connected to the various home systems 1508-1518, as shown in FIG. 15. This could hardly be considered an on board electronic control system for a pool or spa. Nor does Smith describe an on board electronic pool/spa control system.

The Examiner alleges that it would have been obvious to “have incorporated the teachings of Smith et al. into the system disclosed by Joao for the purpose of providing specific controls for the pool equipment disclosed by Joao so that the pool can be effectively and reliably controlled from a remote location.” Applicants do not agree that there is any suggestion or teaching to modify Joao to include all features of the claimed subject matter, nor that one of ordinary skill in the art would be

motivated to modify Joao in the manner asserted by the Examiner. What is more, the alleged combination does not meet the requirements for a prima face case of obviousness.

MPEP 2143.03 states that "to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. ... "All words in a claim must be considered in judging the patentability of that claim against the prior art." If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." [Citations omitted]

To establish prima facie obviousness, the Examiner must establish that all claim limitations are met by the applied art. MPEP 2143

Because the applied references do not disclose all features of Claim 19, as pointed out above, a prima facie case of obviousness has not been established. Similar considerations would apply to the other amended independent claims.

Claim 30 is drawn to a method for remotely monitoring and controlling a pool or spa bathing installation including a recirculation water flow path and an on board electronic pool/spa control system, comprising:

- collecting bathing installation status and parameter data regarding the pool or spa bathing installation at the on board electronic pool/spa control system;

- providing a data communication link between the on board electronic pool/spa control system and a dedicated network interface circuit adapted to provide an Internet connection;

- transmitting the bathing installation status and parameter data over said data communication link and over said Internet connection from said to a remote web server for storage and processing at the remote web server;

- accessing the remote web server by a remote device connected to the Internet to access the bathing installation status and parameter data; and

transmitting control commands from the remote web server to the on board electronic pool/spa control system through the Internet, the dedicated network interface circuit and the data communication link to direct the on board pool/spa electronic control system to affect a change in said bathing installation status.

Joao and Smith do not teach or suggest the limitations of Claim 30, for reasons similar to those discussed above regarding Claim 19.

The applied references also do not describe the subject matter of Claims 20 and 32. The Examiner asserts that “Smith teaches display devices which allow for the capability to view current operational parameters of the pool (e.g. Figure 1 element 15).” Applicants disagree; element 15 is a user interface. Element 15 is not “means connected by an Internet connection to the remote web server for remotely viewing the data stored on the remote server in the form of a graph, chart or table” as recited in Claim 20. Nor does the user interface 15 of Smith describe or teach the subject matter of Claim 32, “remotely accessing the remote server to view a current operational state of the bathing installation.”

Claims 21 and 33:

These claims depend from Claim 19 and Claim 30, respectively, and are allowable for the reasons discussed above regarding the independent claims.

The Examiner has stated that “Official Notice is taken with respect to displaying data associated with the controlling of the pool by way of a chart, table or graph.” Applicants respectfully traverse the finding of Official Notice. It is not clear what fact is noticed. Further, applicants do not agree that the means recited in Claim 21, for example, (means connected by an Internet connection to the remote web server for remotely viewing the data stored on the remote server in the form of a

graph, chart or table) is capable of instant and unquestionable demonstration as being well known prior to applicants' invention. The Examiner is respectfully requested to support this finding with documentary evidence in the next action, if the rejection is maintained. MPEP 2144.03, subpart C.

Similar considerations apply to the subject matter of Claim 33.

Claim 53:

Claim 53 has been rejected as being unpatentable over Joao in view of Smith, and further in view of Official Notice. The rejection is respectfully traversed, for reasons similar to those discussed above regarding Claim 19, from which Claim 53 depends. Moreover, applicants respectfully traverse the finding of Official Notice.

Claim 53 recites that the "on board electronic pool/spa control system is fabricated on a circuit board, and said dedicated network interface circuit is mounted on said circuit board." As pointed out above, neither Joao nor Smith describe an on board electronic pool/spa control system, or a dedicated network interface circuit.

The Examiner states that "Official Notice is taken with respect to a feature wherein a controller and a network interface are mounted on the same circuit board. It is noted that most computers include motherboards or daughterboard's that possess communication ports and microprocessors on the same board since this provides a more compact computing system." Applicants respectfully traverse the finding of Official Notice. It is not clear what fact is noticed. Is it the feature of a controller and a network interface mounted on the same circuit board? If not, is it that most computers... possess communication ports and microprocessors on the same board? If so, why is this relevant to Claim 53? In any event, applicants deny that any noticed fact which is relevant is capable of instant and unquestionable demonstration as being well known prior to applicants' invention. The Examiner is respectfully requested to support this finding with documentary evidence in the next action, if the rejection is maintained. MPEP 2144.03, subpart C.

Because neither reference teaches or suggests the feature of Claim 53, let alone the subject matter of Claim 53 as a whole, a prima facie case of obviousness has not been established.

Claim 31:

Claim 31 is rejected as allegedly being unpatentable over Joao in view of Smith, and further in view of Official Notice.

Claim 30 depends from Claim 30, and is allowable for the reasons discussed above regarding Claim 30. Applicants further traverse the finding of Official Notice. While browsers are well known in using the Word Wide Web, the allegation that the subject matter of Claim 31 would have been obvious is traversed, as well as the inferred finding that Joao may be modified to include a browser to allow visual information to be displayed and to allow a user to interact with the system using on screen controls and or function. That inferred finding is the product of improper hindsight construction.

Claims 39-44 and 48-49:

These claims are rejected as allegedly being unpatentable over Joao in view of Smith, and further in view of Official Notice.

The rejection of Claims 39-44 and 48-49 should be withdrawn for reasons similar to those discussed above regarding Claims 19 and 30. Moreover, neither reference describes, for example, a web-enabled on board electronic pool control system or its use as recited in Claim 39, or an on board electronic bathing installation control system or its use as recited in Claim 40.

Applicants further traverse the finding of Official Notice regarding Claim 41 and JAVA applets. While such applets are known, the allegation that it would have been obvious to incorporate applets in the modified Joao system to arrive at the subject matter of Claim 42, i.e. a method as in Claim 40, further including uploading

said data related to said water parameter in real-time using a Java applet, is respectfully traversed. This finding is the product of improper hindsight reconstruction.

CONCLUSION

The application is in condition for allowance, all pending rejections having been addressed by the foregoing amendments and remarks. Such favorable reconsideration is solicited.

Respectfully submitted,

/Larry K. Roberts/

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Larry K. Roberts
Registration No. 28,464

Law Offices of Larry K. Roberts, Inc.
P.O. Box 8569
Newport Beach, CA 92658-8569
Telephone (949) 250-6008
Facsimile (949) 250-6012